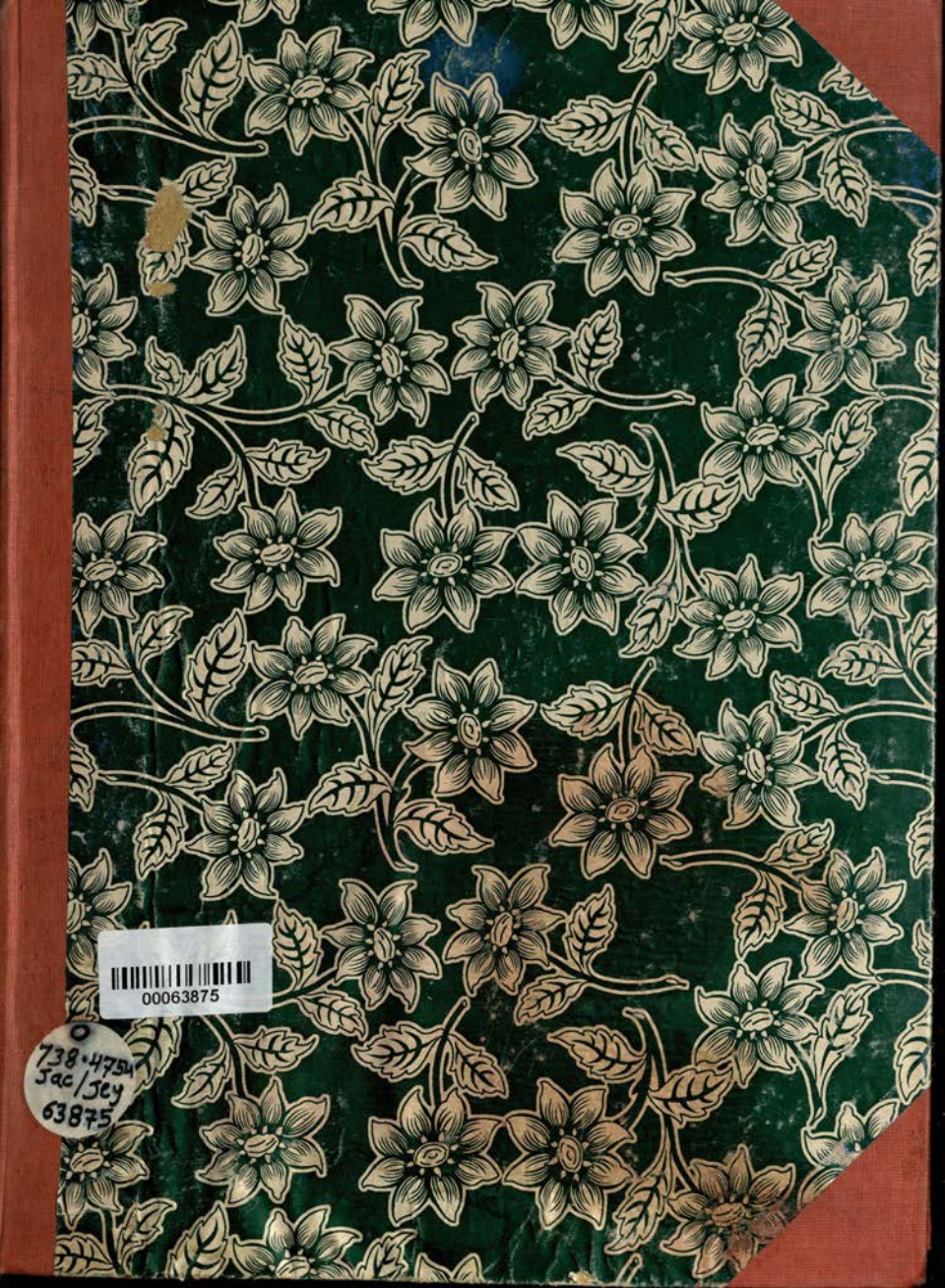

00063875
738.4754
Sac/Sey
63875

Digitized with financial assistance from
Observer Research Foundation
on 17 May, 2019

JEYPORE ENAMELS.

BY

Lieut.-Colonel S. S. JACOB, R.E.,

Executive Engineer, Jeypore,

AND

Surgeon-Major T. H. HENDLEY,

M.R.A.S., &c., Jeypore.

WITH TWENTY-EIGHT FULL-PAGE COLOURED ILLUSTRATIONS CONTAINING ONE HUNDRED AND TWENTY DESIGNS BY W. GRIGGS.

63875

LONDON:
W. GRIGGS, ELM HOUSE, HANOVER STREET, PECKHAM.
1886.

Vx-a-2

00063875

PREFACE.

ALL who see the gold enamel work of Jeypore admire the beautiful designs in which it is carried out. It is with the view of placing some of these designs on record, and affording the public the opportunity of seeing them, that this collection has been made.

The Designs have been drawn by one of the best Jeypore artists, by name Ram Bux, son of Esur; and the only credit I can claim is in having set him to work and paid him for his trouble.

The letterpress has been written by Surgeon-Major T. H. Hendley, Agency Surgeon at Jeypore, to whom I gladly take this opportunity of returning thanks for all his help—in all matters so readily given—especially in this book.

If this work is considered deserving of any credit or notice it is to Dr. Hendley and to Ram Bux that it is due.

JACOB,
LT.-COLONEL,
Exec. Eng. Jeypore State.

Jeypore,
May, 1886.

Jeypore Enamels.

THE art of enamelling on metal is successfully practised in many parts of India, but it is universally acknowledged that the best work on gold is produced at Jeypore, in Rajputana. The colours employed rival the tints of the rainbow in purity and brilliancy, and they are laid on the gold by the Jeypore artists with such exquisite taste that there is never a want of harmony; even when jewels are also used they serve but to enhance the beauty of the enamel.

The enamels of Europe and of Persia are poor and lustreless in comparison with those of Jeypore, and in none of them is the fiery red, for which the latter is so remarkable, at all approached.

At Jeypore enamelling is done on gold, silver, and copper, but it is in works in the most precious metal alone that it has secured the pre-eminence.

The following are the principal places at which the art is practised in India :—

On Gold.	*On Silver.*	*On Copper.*
Jeypore.	Multan.	Kashmir.
Ulwar.	Bahawalpore.	Many places in the
Delhi.	Kashmir & Jamu.	Punjab.
Benares.	Kangra	Jeypore.
	Kulu.	
	Lahore.	
	Hyderabad, Sind.	
	Kurachi, Sind.	
	Abbotabad.	
	Nurpur.	
	Lucknow.	
	Cutch.	
	Jeypore.	

And by individual workmen at other places.

QUASI-ENAMELS.

Pertabgarh. Rutlam.

Labarte, in his Handbook of the Arts of the Middle Ages, endeavours to prove that the art of enamelling originated in Phœnicia, and thence found its way into Persia, where it was known in the reign of Chosroes (A.D. 531 to 579). The Greeks and Indians, in their turn, he thinks, acquired the art from the Persians. He, however, mentions that Mons. Pauthier, in his Histoire de la Chine, quotes a document, in which it is stated that a merchant of Yoüetchi, or Scythia, introduced the art of making glass of different colours into China, in the reign of Thaiwonti (A.D. 422 to 451).

We have, therefore, reasons for believing that enamelling, which is only a branch of the art of vitrification, was known at an early period, if it did not originate, in Scythia, the home of the Turanians. In the Boulak Museum, at Cairo, some of the jewels of the Queen Aahhotep (mother of Aahmes I. of the 18th Dynasty), who lived about B.C. 1700, are ornamented with blue glass and a species of cloisonné enamel. These facts seem to indicate a Turanian origin of the art, and there are many points connected with its practice in India which would appear to confirm the theory. It is remarkable that the best enamellers in Europe have been the Etruscan Florentines, and in modern India the Sikhs, both, it has been observed, of Turanian descent.

The most ancient specimen of Indian enamel now in existence is probably the crutch staff of Maharaja Mán Singh, of Jeypore, one of the greatest of the Chiefs, who adorned the court of Akbar at the close of the sixteenth century.

This staff, upon which the Maharaja leaned when standing before the throne of the Emperor, is fifty-two inches in length, and is composed of thirty-three cylinders of gold arranged on a central core of strong copper, the whole being surmounted by a crutch of light green jade set with gems. Each of the thirty-two upper cylinders is painted in enamel with figures of animals, landscapes, and flowers. The figures are boldly and carefully drawn by one who had evidently studied in the School of Nature; the colours are wonderfully pure and brilliant, and the work is executed with more skill and evenness than is the case in modern examples. A large plate, one of the Prince of Wales' Indian presents, lately shown at the South Kensington Museum, proves the truth of this remark, as it will be at once observed that its colours are often of unequal depth and that there are blotches here and there which much impair its beauty. This, to some extent, however, may be due to the great number of colours attempted, and to the unusually large size of the piece.*

Both ancient and modern Persian enamels are more subdued in tone and more elaborately ornamented than this splendid specimen of ancient art, which is decidedly Turanian in the boldness of its design, in the nature of some of the subjects, as, for example, the lotus flowers and leaves, and in the daring manner in which the primary colours are employed to produce a harmonious

* The plate was put ten times into the fire. 3000 rupees worth of gold were used, and, as the process of manufacture took six years, the interest on the money amounted to 1500 rupees more. This is an important point in estimating the value of plate. The artist who enamelled the plate was Ram Singh, the brother of Kishan Singh.

NOTE.—The greater portion of the present article has already appeared in the second number of the INDIAN ART JOURNAL, and in the "Memorials of the Jeypore Exhibition." The notes on the plates are new, and the description of the processes of enamelling have been carefully verified on the spot, and numerous additions have been made. Mr. Griggs, as in the works above named, has been very successful in reproducing the beautiful lines of the enamel.—T. H. HENDLEY.

whole. We must also recollect that the owner of this most venerable piece of enamel was one of the pillars of the throne of a true Turanian sovereign—a most munificent patron of the arts, alike of his new home in India and of his ancestral dominions in Central Asia—that he had himself governed the kingdom of Cabul, and that other works of art, for example, a number of carpets, still in existence at Jeypore, were brought by him from the North, and are decidedly Turanian in design.*

In many of these carpets the Tartar cloud and lotus are prominent features. So it is also with some of the wall decorations of the Jeypore palaces of this period. It is thus clear that at the time of the production of the earliest known specimen of Indian enamel, Turanian art was in the ascendant.

Maharaja Mán Singh is stated to have brought five Sikh enamel workers from Lahore, and the fact that the descendants of these men still procure their colours from that town to carry on the trade of their forefathers confirms that tradition. The principal enamellers in Jeypore, all descended from these Sikhs, are as follows :—

Hari Singh . . .	descended from Zoráwar Singh.		
Amar Singh . .			
Kishan Singh . .	,,	,,	Jawahir Singh.
Ghuma Singh . .			
Sham Singh. . .			
Gheesa Singh . .			
Amba Singh. . .	,,	,,	Sookha Singh.
Gokal	,,	,,	Bhairun Singh.
Har Sookh Singh .	,,	,,	Unknown.

The fifth family is extinct.

Ram Singh, Hari Singh and Kishan Singh, who have died recently, were considered the best artists, and to the latter was awarded the first prize at the late Jeypore Exhibition.

The enamellers rarely work directly for the public, but execute orders for the rich jewellers, who usually send them the article to be enamelled ready for the process.

Enamelling or painting on metals with mineral oxides—in such a manner that the colours are fixed upon, or adhere to the metal—is done in several ways. That by incrustation is the Oriental method.

There are two kinds of incrusted enamels—the Cloisonné, or filagree enamel, and the Champlevé, in which the outline is formed by the plate itself, while the colours are placed in depressions hollowed out of the metal to receive them, and are made to adhere by fire.

The design is prepared by the *chitera*, or artist, generally a servant of the master jeweller, who also keeps books of patterns, some of great age, from which customers can make a selection, generally with a very good idea of the result to be obtained in metal, as may be judged from the illustrations in this book.

The *sunar*, or goldsmith, then forms the article to be enamelled, and afterwards passes it on to the *gharai*, the chaser or engraver, who engraves the pattern. These men are not Sikhs, but ordinary members of the goldsmith or carpenter sub-castes of Hindus. The engraving is done with steel styles, and the polishing is completed with similar tools, and agate burnishers. *Plate 28.*

The surface of the pits in the gold is ornamented, with hatchings, which serve not only to make the enamel adhere firmly, but to increase the play of light and shade through the transparent colours. The enameller or *minakár* now applies the colours in the order of their hardness, or power of resisting fire, beginning with the hardest. Before the enamel is applied, the surface of the ornament is carefully burnished and cleansed

The colours are obtained in opaque vitreous masses from Lahore, where they are prepared by Mahomedan *manihárs*, or bracelet makers. The Jeypore workmen state that they cannot make the colours themselves. One of the Lahore men has, however, recently settled in Jeypore.

Some of the enamellers have begun to use European colours, especially French blue, with injurious results. Every possible means will be adopted to discourage this fatal error.

The base of each colour is vitreous, and the colouring matter is the oxide of a metal such as cobalt or iron. Large quantities of cobalt are obtained from Babai, near Khetri, the chief town of a tributary state of Jeypore, and are used in producing the beautiful blue enamel.*

All the colours known can be applied to gold. Black, green, blue, dark yellow, orange, pink, and a peculiar salmon colour, can be used with silver. Copper only admits of the employment of white, black, and pink, and even of these the last is made to adhere with difficulty (this applies to Jeypore copper enamels). In the order of hardness and of application to the metals, the colours are as follow—white, blue, black, yellow, pink, green and red. The pure ruby red is the most fugitive, and it is only the most experienced workmen who can bring out its beauties. Moreover, the Jeypore artist alone succeeds in giving the transparent lustre to this colour which so charmed and surprised the jurors of the earliest great international European exhibitions, The enamel workers of Ulwar, an offshoot from Jeypore, are sometimes fairly successful, but the Delhi jewellers, who turn out a good deal of inferior enamel,

* In the Ain-i-Akbari, or Institutes of Akbar by Abul Fazl, there is an interesting note under the head *Minakár*, or Enameller. He is said to "enamel rupees, flagons, and rings; he first lays on the colour, and after enamelling puts the metal into the fire two or three times. For a tola of gold that he enamels he charges 16 dams (two-fifths of a rupee). For a tola of silver 7 dams." These were probably the prices paid for inferior work. Nothing is mentioned with regard to the history of enamelling, as of other arts, but it is stated that Akbar did his utmost to attract the best artists from all parts of the world.

* "An ore of cobalt called saita (or sehta) is found in the slate hills near Babai in fine strings, and sparsely disseminated through the slates, with pyrrhotite (magnetic iron pyrites) and copper pyrites. It is described in mineralogical works as Sypeoorite (probably a mistake for Jyepoorite), Sulphuret of cobalt (sulphur 36·33, cobalt 64·67). The ore in use for colouring enamels, bangles, &c., is of a blue colour." *Records of the Geological Survey of India. Vol. XIII, page 248.*

only produce a red with an orange or yellow tinge. They are, however, improving.

The red lines can only be applied on gold alloyed, at the most, with one ninety-sixth part of copper.*

The Jeypore artist is renowned not only for the purity of his colours, but for the evenness with which they are applied—though here he, too, does not equal the early enamellers in skill; partly, perhaps, because of the haste with which everything is wanted in the present day, but chiefly owing, in important works, to the great sizes now attempted. The mediæval workmen rarely undertook such large specimens, but generally built up any considerable piece by uniting many smaller ones. The enameller, as before mentioned, begins with the whites, and usually burns in each colour separately, though two or more may be fixed at one firing. The colour is roughly pulverised in an iron mortar and more finely triturated in one of agate with a pestle of the same material, it is then made into a paste which is applied with a probe. As soon as a sufficient number of pieces of the same colour are ready, the furnace—a very primitive construction of clay—is charged with charcoal of fine quality, and made hot. The ornaments are put one by one on a piece of iron directly over the glowing coals, and the heat is maintained at such a degree, and for such a time, as experience has proved to be requisite for fixing the particular colour. The white colour requires about one minute, the red much less time.

If a colour is spoilt a little alum is put on it and the plate is again heated in the hope that it may turn out well. It is, however, better to begin again. Ram Singh's great plate was spoilt three times.

The piece is next polished with *kurand*, or corundum, and if after this any defect in the enamel should appear, the work is done over again. The ornament, after being polished, is heated gently, and cleansed by rapidly immersing it in a strong acid solution made from fruit. Each colour—or group of colours in some cases—requires similar care, and as large specimens may have to be fired many times, it is evident that the cost of enamelling must always be heavy, and that really good pieces can never be prepared hastily.

In the case of articles taking a long time to prepare, or made only in the hope of sale, perhaps at a distant date, there is also the value of the interest on the jeweller's capital to be considered in estimating the value of the piece.

The enameller always works in his own home, and is assisted by most of his family. For example, in the house of Kishan Singh, the father works in a room on the ground floor, to enable him to watch the furnace, which from time to time is fed by the women of the family, who carry on their domestic occupations in the central courtyard; his sons and grandsons sit in a small hut on the roof, painting the enamel colours on ornaments of all kinds, ranging, in the case of the sons, from elaborate plates, to small lockets and similar articles, upon which the youngest children, of seven or eight, are trying their powers.* Each artist sits on the ground before a low stool, in front of which are ranged his moistened colours, in a palette made of a row of depressions in a long piece of brass. His dry colours, tools, and other appliances are also placed on the stool. (See Frontispiece.)

Rare old designs, valuable ornaments and pigments, are tied up in dirty rags, and kept in niches in the walls of the rooms. A strong carved door shuts off the house and its occupants from the street, and serves to keep out thieves and too curious visitors.

Such are the conditions under which most art work is executed in India.

If the process of firing is done immediately after each colour is applied, the ornament, if of the ordinary character, can be enamelled and set with gems at the rate of about three or four days for each tola, or one rupee weight; thus, for example, a bracelet of five tolas weight would take from fifteen to twenty days for completion. The cost varies, according to the number of colours, from two to five rupees for each tola in weight of gold. Large pieces cost more in proportion.

The total annual sale of enamel in Jeypore is from 15,000 to 20,000 rupees, of which, perhaps, a third may be for Europeans.

It has been frequently stated that the manufacture of enamel is a royal monopoly at Jeypore. This is incorrect. When work has to be done for the Court, all other orders are put aside until its completion; but beyond this there is no restriction—not even a tax upon the manufacture. It is a case of the largest and most important purchaser having the first claim; and it is simply owing to the liberal patronage of the Jeypore princes, especially at times of unusual distress or scarcity of money amongst the ordinary purchasers, that the enamellers, like so many more art workmen, have been able for so long a period to remain at their capital.

The uses to which enamel is put are very varied. All the better kinds of native jewellery are enamelled on the back, and usually, also, on the edges and between the gems in front.

Charms, armlets, anklets or bangles, and necklaces, are made in large numbers; and, for the use of princes and nobles, the handles of swords, of daggers, of fans or umbrellas, of whisks of yak-tails or *chamaras*, of peacocks' feathers or *morchhals* of ivory threads, and sometimes vessels, are prepared.

Horse, camel, and elephant trappings have also been adorned with gold enamel; in short, where gold and jewels can be employed for enriching metallic surfaces, enamel is equally available, and with precious stones it can also be used as a foil, or to enhance their beauty.

A magnificent collection of Jeypore enamels, which was presented by H.H. the late Maharaja of Jeypore to H.R.H. the Prince of Wales, was shown for some time

* Jeypore is also celebrated for the beauty of its red dyes.

* Kishan Singh has recently died.

in the Indian Section of the South Kensington Museum.

The following list is taken from the catalogue of the Jeypore Exhibition of 1883; it will give an idea of the style and cost of articles made for Europeans.

	Rs.	as.	p.
Bracelet, crocodile pattern	100	0	0
„ oval in cross section	108	0	0
„ plaques of Jeypore enamel, with Pertabgarh work on the backs of each	108	0	0
„ set with diamonds	200	0	0
'Atrdän (perfume holder) and tray (a large piece)	490	0	0
Ditto, smaller	165	0	0
Fish Ring, enamelled	6	8	0
Pair of Earrings	18	0	0
Lockets, mango-shaped, weighing from ½ a tola to 2½ tolas 15	0	0 to	75	0	0
Lockets, flat, English shape... 25	0	0 to	75	0	0
Necklaces, plain or set with gems— 210	0	0 to	1200	0	0
Hair Pin	10	0	0
Breast Pin	12	0	0
Toothpick	7	0	0

Besides these, sleeve-links, card-cases, match-boxes, whistles, jointed fish charms, scarf-rings, and brooches are made.

The most characteristic and inexpensive examples of the work are perhaps mango-shaped charms or lockets, which may be bought for from 25 to 35 rupees, and bracelets at about 95 to 150 rupees each.

The *kairi*,* or mango-shaped locket, is used by Hindus to contain scent, and by Mahomedans to hold a small compass to indicate the direction of Mecca.

The bracelets are usually oval in section when made for Europeans, and are enamelled as carefully on the inner as on the outer surface. The ornament is always made hollow, and is filled up with a composition, composed of two parts of alum and one of salt, pulverised together and heated with the specimen. The necklaces are generally series of plaques united by chains or links of gold, and are reversible, the back being constructed of medallions of Pertabgarh or Rutlam enamels.

Necklets or *hars*, rosaries and watch-chains of enamelled balls, are also made. As the plaques used as brooches afford good surfaces for enamelling, the designs upon them are bolder than usual.

Large cups and plates are occasionally made, and it is evident that the art may be applied to many other uses, such as the adornment of the cases of ladies' watches, of small boxes, and of church plate.

All the above remarks relate to work on gold. The Jeypore jewellers have always maintained that, for good enamelling, almost pure metal must be employed. To a certain extent and for some colours this is correct, but fair results can be obtained on 22 or even on 18 carat gold, and no doubt for many small ornaments they adopt the lowest standard possible and profit by so doing.

* The word means "parrot" as well as mango.

Silver enamel of good quality is frequently made in Jeypore by Ghuma Singh and at the School of Art, but its production is not much encouraged by the jewellers, and the men do not like to work in this metal, as the difficulties of fixing the colours and the risks are much greater than when gold is used. There is some demand for false eyes for idols in enamel on copper, but beyond this little work is executed in that material.

Unlike some of the champlevé copper enamel of Limoges the flesh of figures is always done in colour and not in gold. The Jeypore enamel is very different from that of Limoges, in which, moreover, the beautiful red hues are not attempted. The nearest approach to this colour in the excellent collection of the latter at the British Museum is an orange red on the coat of a man standing near the cross in a study of the crucifixion by Jean De Court, circa. 1550.

There are some good examples of enamel on the precious metals at the same Museum, for example, the Dagger of Hyder Ali (A.D. 1728—1782), given by him to Sir Hector Monro, K.C.B., the sheath mounts of which are fair specimens of Jeypore enamel on gold.

Close to this is a dagger with ornament in Persian enamel.

Traces of red enamel very similar to that of Jeypore are observable on a pair of snuffers made in Italy in the time of Henry VIII for Cardinal Bainbridge; this is interesting as it is in all probability the work of Florentines of Turanian descent.

In the Jewellery Section of the Indian Museum at South Kensington there are many specimens of enamel on gold, beside those in the Prince of Wales' collection, such as :—

No. 03,003. Three coarsely-enamelled Nathdwara charms (a holy shrine in Rajputana). From Jeypore.

No. 08,668. Dragon's-head bracelet, labelled "Bengal." Probably fair Jeypore gold enamel.

No. 03,304. Necklace with gold enamel on the back.

No. 3,400. Section, *Arms and Armour*, is a good specimen of Persian work on gold enamel sword mounts.

As regards design, it is unquestionable that the modern Indian work is less artistic than the old. The boldness and character shown in the older examples have given place to elaborate repetitions of Persian floral and geometrical ornament, with the addition of microscopic birds and animals.

The truth of these remarks is not only borne out by the illustrations in this volume, but was evident to the jurors at the Jeypore Exhibition, who had a good opportunity of comparing some fine old specimens, lent by Indian princes, with a large selection of modern examples of weapons, and plate, such as hookas and their appurtenances. Mr. Kipling, the official reporter for the Enamel Classes, writes that "One or two articles of an older date in the loan collection, *e.g.*, a dagger sheath from the Maharaja of Jeypore, were

superior in tone and quality of colour to any new work shown." H.H. the Maharaja of Jhallawar, exhibited at Jeypore a dagger, the gold sheath of which was beautifully decorated with Persian enamel in about twelve different colours. The superiority of the Indian work even to this charming example was unquestionable, and it was dependent upon the judicious use of pure primary colours harmonised as only the Indian artist knows how to do, instead of employing a lower scale of tints.

It has been observed that in England the art of enamelling has been greatly depressed and retarded by the considerable advantage the enameller derives from the discovery of any colour uncommonly brilliant, clear, or hard, as on this account the artist naturally endeavours to keep his process secret as the source of private gain. This is equally true of India, but it is evident that to know how to produce certain colours is by no means the only cause of success, as in families using the same pigments, and, presumably, all equally well acquainted with the technical processes, one—as, for example, the father, in Kishan Singh's household—may be a master workman, while his sons are only in the second or third rank. The power of producing a good pure red is the measure of the ability of the enameller.

Mr. Baden-Powell, in his excellent account of Indian enamelling in the Handbook of the Manufactures of the Punjab, has given formulæ for making some of the enamel colours; but as little is known on the subject, and objections are made to disclosing what are really trade secrets, it has not been thought necessary to attempt to describe them here.

Some fine silver enamel work was sent to the Jeypore Exhibition from Bahawalpur—

	Rs.	as.	p.
A Surahi or water-bottle	85	8	9
A Tumbler	87	8	0
A scent phial (atrdan)	17	8	0
An antimony holder (Surmadani) ...	16	5	11

All these articles were parcel-gilt silver enamel, coloured dark blue and emerald green. The patterns are chiefly conventional flowers in panels, scrolls, and geometrical diaper work. The general effect was rich and handsome. This work does not require frequent firing. It is probably of the same origin as the Multan enamel, which is stated by Mr. Baden-Powell to have been first made there by one Naulu, 400 years ago. The colours generally employed are blue, black, yellow, and several shades of orange, brick-dust red, or pink. The articles manufactured are chiefly personal ornaments in silver, such as bracelets, necklaces, studs of various kinds, &c. The principal dealers are Vasu Ram, and Khema Ram, who charge about R. 1-4 to Rs. 2 per tola for workmanship.

A very few cheap enamel ornaments of similar character were sent to the Simla Exhibition of 1881 from Hyderabad in Sind. A good red colour was used effectively in some of them.

The enamels from Kangra and Kulu, also applied to silver jewellery, are remarkable for the excellence of their blues and are often parcel-gilt. Specimens from all these places are shown at the Indian Museum at South Kensington.

The Rewah Durbar exhibited at Jeypore a magnificent silver gilt and enamelled hooka, made at Lucknow by Lachhman Das and Sham Lal. The blue and green enamelled grounds contrasted beautifully with the flowers of white spinel. There is also a fine hooka in the new Indian Collection at South Kensington, in which yellow, brown, orange, and light blue tints are employed in addition to the dark blues and green; the general effect, however, is poor, and not equal to a plate of similar work from Kashmir displayed in the same case.

DESCRIPTION OF PLATES.

PLATE 1. The principal enameller in this group, Guma Singh, son of Kishan Singh, sits before a low stool upon which his colours and styles are arranged. The larger implements are placed on the ground near him, and he holds the piece on which he is at work in his hands. The colours are placed in depressions in a thin brass plate which is wedged into the front of the stool. On his right Dhuna Singh is engaged in heating the enamelled plate in a small clay furnace; Bihari Singh, who sits on his left, polishes an ornament after the colour is fixed, and Hazari Singh is engraving another plate.

PLATE 2. A number of the more common designs are shewn in this plate to enable the reader to identify the flowers, &c., in the other illustrations. They were originally prepared for the backs of hunting-knives.

PLATE 3. The first eight designs are for the bracelets termed *Chur*. The balls are hollow.

The ninth is of the pointed end of the goad used for driving elephants. It is termed *Ankas* or *Ankush*, and, when made of gold or enamel, is presented by rajas to men of rank. It forms part of the *Khillat* or dress of honour given by the Maharaja of Jeypore to some of the higher nobles, when they leave the capital for their homes, and when they come out from the palace after the gift has been received, they usually suspend it from their necks that all the world may perceive that their high position has been properly recognized by their feudal lord. The female figure springs from the mouth of an *Azhdar* or *Azhdaha*, a dragon or serpent slain by Rustam, one of the heroes of the *Shahnamah* of Firdusi, the famous Persian poet.

PLATE 4. These all represent the mounts of sword-scabbards or dagger-sheaths, the scabbards themselves are made of wood which is covered with velvet. The flowers imitated are the Rose, Lily, Chrysanthemum Indicum and Narcissus; and the birds, Peacocks, Cranes, Doves and Parrots.

The sword to which the larger mounts are fitted is the curved Indian weapon known as the *Tulwar*.

PLATE 5. The hilts and mounts illustrated in this plate belong to a truly regal weapon. The hilt bears upon it the conventional representation of the Sun, from whom the Jeypore and other Rajput princes are said to have descended.

The flowers are simple but beautiful; on the hilt the *Daudi* or Chrysanthemum Indicum., on the centre mount the *Sosun* or Lily, and on the top the Rose and the *Hazara* Balsam are displayed.

PLATE 6. The flowers on both hilts are the Chrysanthemum Indicum. The Tiger and Lion are always proper terminations for Indian swords. The Hakim Shahi hilt (*b*) is of the ordinary Indian form.

PLATE 7. The sword-hilt (*a*) has a pistol-shaped head such as is more often used for daggers. The flowers are the Lily and Chrysanthemum Indicum. Roses, Lilies, and buds of another flower enrich the hilt (*d*) which is suitable for an English straight sword. It has a knuckle-guard.

PLATE 8. The three articles in this plate belong to one set and are worth Rs. 6,200. The cup is decorated with Lilies, Lotuses and Chrysanthemum Indicum, with pointed petals. The saucer has a border of C. Indicum and *Nargis* Narcissus. In three of the medallions in the centre combats of animals are represented.

PLATE 9. The *'atrdan* or perfume stand is an essential piece of plate in every Indian Noble's house. In the lower portion *pan* or betel is placed, and in the lotus at the top, which opens, is kept the fragrant oil with which guests are anointed when they take leave of their host.

The perfume (*'atr* of roses or a mixture of *'atr* and sandal oil) is either put in a small cup inside the lotus or a piece of cotton is saturated with it. The salver is used with the *'atrdan* and is a very rich example of enamel. The animal subjects in the medallions are very well drawn.

PLATE 10. The large vase and bowl are both decorated with Lilies and Roses, and in the *Chaughara* or vessel with four medallions animal subjects have been judiciously introduced.

PLATE 11. The remarks on plate 10 apply also to *a* and *c* of this page; *c* is a case attached to the waist-belt for reception of the sword.

PLATE 12. The *Arya*, a neck or forehead ornament, is of a regal design, reminding one of the Assyrian Jewellery. It is peculiar to Marwar, a country in which many relics of ancient art and custom still exist; thus for example, the royal dance of Marwar, the *Ghanna*, in which the performers move in circles, was noticed by Nicolo-a-Conti the Venetian traveller in the fifteenth century.

On the top of the octagonal box (*b*) animals are very skilfully introduced amongst the flowers.

PLATE 13. *a*—The boss of a shield adorned with figures of elephants and mounted horsemen. Each shield has four bosses, a side-guard, and often a sun or crescent on the front.

b—Roses and lilies with birds are used in this

necklace. The pendants *ath pahla* are very pretty. It is usual to enamel one side in gold and to enrich the other with the quasi enamel of Pertabgarh, in which quaint figures are cut out in gold and fixed to a deep emerald green vitreous ground. The necklaces in most can be worn with either side uppermost. Sometimes the backs of the plaques are enamelled in gold, and the design for Hindus is generally one shewing the impressions of two feet with the device *Sri Nath Jee*, or honour to Sri Nath,* a form of Krishna, worshipped at Nathdwara in Meywar or Oodeypore.

c and *d*—The only remark on these two necklaces need be that the shape of the plaques is of Tartar origin.

PLATE 14. *a*—An Earring with a *Jhumka* or pendant shaped like a bell. The upper portion is set with flat diamonds or lasques.

b—The pendants of this necklace are very handsome and are much liked by Europeans. The smaller beads are of gold.

c—This is a handsome and costly necklace.

PLATE 15. The cost of this necklace is due to the large number of diamonds employed. The ends of the cord by which it is fastened round the neck are covered with seed pearls or turquoises. The fish pattern pendant is most commonly used in Luknow, and the star-shaped pendants of the second necklace are most frequently seen in the facetted silver gilt ornaments of the same city.

PLATE 16. *a—Kantha.* A necklace of this form is commonly worn by native ladies. Crystal, topazes or spinels, are often used instead of diamonds; thus considerably reducing the cost of the ornament.

b—This may be worn as a necklace or *Sarpech* or a forehead ornament, or may be tied on the turban. The central piece is known as *Chand* or moonshaped.

PLATE 17. *a*—An ear-ring, termed *Machhi toli* or fish and parrot ear-ring.

b—Champa-Kali. The drops of this necklace are supposed to resemble the unexpanded buds of the *Champa* flower (Michelia Champaca, of the order Magnoliaceæ).

PLATE 18. *a—Mor-patta.* This is one of a pair of ornaments worn across the head; the hook is fastened at the central parting of the hair, and the end hangs over the ear. The triangular pendants are somewhat Assyrian in design and go well with the *Arya* or Marwar Necklace (Plate 12. *a*.). The ring *e* of same pattern may be worn in the ear. There is nothing special about the rings *c, d, f, g* and *h*.

b—A necklace or *har*. The diamonds used are very thin and inexpensive. The total cost is Rs. 1,400.

PLATE 19. *a*—The *Sarpech* or forehead ornament is worn on the front of the *pagri* or turban. The back is carefully enamelled. The one illustrated was made for H. H. The Maharaja of Oodeypore. It is termed *Tin Kalangi Sarpech* or forehead ornament with three plumes.

b—Ek Kalangi Sarpech or forehead ornament with one plume. The central plaque is a *Chand* or crescent.

PLATE 20. *a*—This is also a form of *Sarpech* to be tied on the *pagri* or turban.

b, c, d—These ornaments may be worn as diadems *(Sarpech)* on the turban, or as armlets or bracelets.

PLATE 21. *a, b, c, d, e*—These may be worn on the sides of the head or as bracelets. They are all very characteristic ornaments, and afford good surfaces for the use of enamel.

The remainder of the illustrations in this plate are of pendants to necklaces or brooches.

PLATE 22. *a, b, c, d*—Ear-rings.

e—Hath-phul. An ornament worn on the back of the hand. The rings are for two of the fingers, and the lower band is fastened round the wrist. The rest of the designs are for pendants.

PLATE 23. *a* and *b*—Two ornaments *(Jhala)* worn over the side of the head. Heavy, hollow, bell-shaped pieces *(Jhumka)* are suspended from them near the ears.

c and *d*—Two richly enamelled handles for the fly whisks, known as *Chamar* or *Chamra*. Several of the tails of the Bos Grunniens when carefully cleaned are attached to the staff. The flapper is a symbol of royalty, high nobility, or priestly dignity.

PLATE 24. The ornaments on this page may be worn as bracelets or anklets. In India, by men, only nobles or scions of royalty are allowed to wear anklets of gold. As a rule these are quite plain though of considerable weight; but wealthy persons on state occasions wear them richly studded with gems and enamelled.

The ends of *a* and *c* are formed to resemble the heads of elephants, and of *b* the heads of the great Persian dragon *Azhdar* or *Azhdaha*, while *d* represents two snakes (the Cobra or Naja Tripudians) coiled round each other.

PLATE 25. A pair of Epaulets of gold, enamelled and adorned with gems. The first was made for H. H. The late Maharaja of Jeypore; the second, for the Thakur of Digi, a Jeypore noble.

They are intended to be worn with robes of brocade or silk.

PLATE 26. *a, b* and *f*—These are of European design, and are included to show that the Jeypore enamel can also be employed in enriching such objects.

c, d, e—Ear-rings.

PLATES 27 and 28. The instruments and appliances used by the enameller.

* "The revered lord."

ILLUSTRATIONS.

PLATE.

1. Group of Jeypore Enamellers at work.

2. 1 to 20.—A series of designs for the Backs of Daggers, or Hunting Knives.

3. 1 to 8.—Designs for Bracelets. 1 to 4 are parts of 5 to 8. 9.—The end of an Elephant Goad or *Ankas*. The Female Figure issues from the mouth of a Dragon (*Ajdahar*).

4. *a*.—Top Mount of Sword Scabbard. *b*, *c*.—Bottom Mount of Sword Scabbard (both sides). *d*.—Bottom Mount of Dagger Sheath.

5. *a*.—Sword Handle. Enamel on Gold set with Diamonds. *b*, *c*.—Central and Point Mounts of Sword Scabbard.

6. *a*.—Tiger Headed Sword Handle. *b*.—Hakim Shahi Sword Hilt.

7. *a*.—Sword Hilt. *b*, *c*.—Side Pieces of *a*. *d*.—Sword Hilt with Hand Guard. *e*.—Piece of *d*.

8. *a*.—Cup. *b*.—Spoon. *c*.—Saucer for *a*.

9. *a*.—'Atrdān, or Perfume Stand. *b*.—Salver.

10. *a*.—Vase with Four Medallions (*Chaughara-phul dān*). *b*.—Bowl.

11. *a*.—Vase (*Chaughara dān*). *b*.—Sword Case (*Partala*). *c*.—Bowl.

12. *a*.—Neck Ornament (*Arya*), Marwar pattern, worn by Hindus. *b*.—Top of a Box.

13. *a*.—Boss of Shield. *b*.—Necklace, with Octagonal (*Ath-pahlū*) Pendants. *c*.—Necklace, with Pendants. *d*.—Necklace and Pendants.

14. *a*.—Ear-ring (*Kān*). *b*.—Necklace. *c*.—Necklace.

15. *a*.—Necklace, with Fish-shaped Pendants (*Kanth sari, machhli dār*). *b*.—Necklace, with Star-shaped Pendants.

16. *a*.—Necklace (*Kantha*). *b*.—Forehead Ornament.

17. *a*.—Ear-ring (*Machhi toli*), Fish pattern. *b*.—Necklace (*Champa-Kali*).

18. *b*.—Necklace (*Hār*). *a*, *c*, *d*, *e*, *f*, *g*, *h*.—Ear-rings (*Pīpal pati*).

19. *a* and *b*.—Forehead Ornaments (*Sarpech*).

20. *a*.—Forehead Ornament (*Surpech*), with Plume. *b*.—Bracelet (*Panchi*). *c*.—Bracelet (*Panchi*). *d*.—Bracelet (*Panchi*).

21. *a* to *e*.—Ornaments worn on the side of the Head (*Jhālā*). *f* to *n*.—Brooches or Pendants.

22. *a*, *b*.—Ear-rings (*Gimda*). *c*, *d*.—Ear-rings (*Karanphul*). *e*.—Hand Ornament (*Hāth-phul*). *f*.—Pendant (*Bala*). *g* and *k*.—*Niyām* Parts of a Necklace worn by Men. *h* and *l*.—*Niyām* Parts of a Necklace worn by Men.

23. *a*.—*Jhālā*, worn over side of Head. *b*.—*Jhālā*, worn over side of Head. *c*.—Fly Whisk Handle or *Chāmara Ki-dandi*. *d*.—Fly Whisk Handle, *Chamar* or *Chāmara*.

24. *a*.—Elephant Headed Bracelet. *b*.—Dragon Headed Bracelet. *c*.—Elephant Headed Bracelet. *d*.—Snake Pattern Bracelet.

25. Epaulets.

26. *a*, *b*, *f*.—Bracelets. *c*.—Ear-ring. *d*.—Ear-ring. *e*.—Ear-ring.

27. Enamel Worker's Implements. *a*.—Poker. *b*.—Tongs. *c*.—Forceps. *d*.—Scissors. *e*.—Pestle and Mortar. *f*.—Blowpipe.

28. Enamel Worker's Implements. *a*.—Graver for Scratching. *b*, *c*.—For Engraving. *d*.—For Polishing. *e*.—Polishing Instrument. *f*.—*Shān*. Plaque of Corundum and Wax. *g*.—Ditto for Sharpening Tools. *h*.—Forceps. *k*.—Compass. *l*.—Waxed Tool for Holding the Plate.

APPENDIX.

PLATE.	NUMBER.	NAME OF ARTICLE.	VALUE IN RUPEES. Gold.	Jewels	Labour	Total Cst	NAME OF ENAMELLER	Number of times in fire.	Time in months complete.	NAME OF PURCHASER IF THE ARTICLES HAVE BEEN MADE.	REMARKS.
2	1 to 20	Plates for the backs of daggers	100		50	150	Unknown	5	3	An English tourist	
3	1 to 4..	Portions of 5 to 8					Rām Singh			Made for some English ladies	
	5 to 8..	Bracelets, *Chur*	450	50	100	600		6	3		
	9 ...	Elephant goad, *Ankas*	600	250	400	1,250	Hari Singh	6	5		The end of the goad only is enamelled.
4	*a* ...	Top mount of Sword Scabbard									Unknown.
	b ...	Bottom mount of ditto									
	c ...	Ditto of opposite side									
	d ...	Tip mount of Dagger Sheath									
5	*a* ...	Sword Handle }	700	8,000	1,300	10,000	Unknown	5	12	Sold to a jeweller	Set with diamonds.
	b & *c*..	Central and Tip mount of *a* }									
6	*a* ...	Sword Handle	700	5,000	1,000	6,700				For a Punjab noble	
	b ...	Hakim Shahi ditto	500	5,000	1,000	6,500				The Begum of Bhopāl	
7	*a* ...	Persian Sword Hilt	600	4,000	500	5,100	Hari Singh	5	12	Maharāna of Oodeypore	
	b & *c*...	Parts of *a*									
	d ...	Handle of Straight Sword	700	2,000	500	3,200	Do.				
	e ...	Part of *d*									
8	*a* & *c*..	Cup ...	1,200	3,000	800	5,000	Rām Singh	5	12		Set with diamonds.
	b ...	Spoon ...	100	1,000	100	1,200	Do.	5	6		
9	*a* ...	Perfume Stand	2,000	7,000	1,000	10,000	Hira Singh	5	60	Presented to H.R.H. Prince of Wales	
	b ...	Salver for *a*	3,500		1,500	5,000					
10	*a* ...	Vase				3,000		5	12		
	b ...	Bowl				3,000		5	12		
11	*a* ...	Vase				2,500		5	12		
	b ...	Sword Case				100					
	c ...	Bowl				3,000		5	6		
12	*a* ...	Neck Ornament	1,000	10,000	1,000	12,000		5	24		Set with pearls & diamonds, Marwar pattern.
	b ...	Top of Box				2000		7	24	London Exhibition, 1861	If set with diamonds costs Rs. 5,000.
13	*a* ...	Boss of a Shield*				1,500		5	6		*Cost of the set of four, a crescent and side guard is given.
	b ...	Necklace				500 & 1,000		5	6		According to stones used.
	c ...	Do.				1,000	Rām Marain	5	6		Both sides enamelled.
	d ...	Do.				500		5	6		Both sides enamelled.
14	*a* ...	Ear-ring	100	1,200	100	1,400		5	2		Rs. 500 diamonds and Rs. 700 pearls.
	b ...	Necklace	500	1,000	500	2,000		5	6		Set with pearls.
	c ...	Do.	500	1,000	500	2,000		5	6		Set with pearls.
15	*a* ...	Necklace	250	1,800	2,000	2,250		5	6		Rs. 1,000 pearls, Rs. 500 diamonds, other stones Rs. 300.
	b ...	Do.	200	600	50	850		5	6		Rs. 500 diamonds, Rs. 100 pearls.
16	*a* ...	Necklace	500	3,000	200	3,700		5	6		Rs. 2,000 diamonds, Rs. 1,000 pearls.
	b ...	Do.	100	500	50	650		5	6		Rs. 200 diamonds, Rs. 200 pearls.
17	*a* ...	Ear-ring	50	700	100	850	Shankar	5	2		Rs. 200 diamonds, Rs. 500 pearls.
	b ...	Necklace				1,000		5	6		Rs. 500 pearls, Rs. 500 diamonds

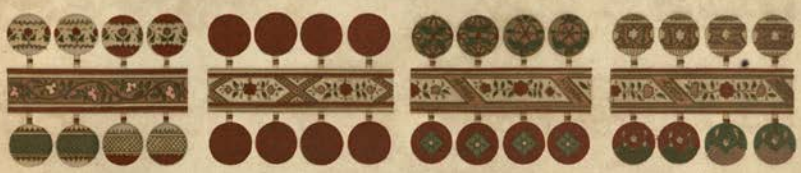
PLATE.	NUMBER.	NAME OF ARTICLE.	VALUE IN RUPEES. Gold.	Jewels	Labour	Total Cst.	NAME OF ENAMELLER	Number of times in fire	Time in months to complete	NAME OF PURCHASER IF THE ARTICLES HAVE BEEN MADE.	REMARKS.
18	*b* ...	Necklace	300	1,000	100	1,400		5	4		Rs. 500 pearls, Rs. 500 diamonds
	a ...	Head Ornament	100	200	50	350		5	4		
	c ...	Ear-rings. Per pair				40		5			
	d ...	Do. do.				500		5	4		
	e ...	Do. do.				75					
	f ...	Do. do.				25					
	g ...	Do. do.				200					
	h ...	Do. do.				50					
19	*a* ...	Forehead Ornament				5,000	Hira Singh	5	4	Maharāna of Oodeypore	
	b ...	Do.				3,000					
20	*a* ...	Do.	200	5,300	300	5,800	Rām Singh	5	6		Rs. 2,000 pearls, Rs. 2,000 diamonds, Rs. 1,800 other gems.
	b ...	Wrist Ornament	250	6,000	250	6,500	Do.	5	6	Mahārāja of Jodhpore	Set with diamonds.
	c ...	Do.	250	2,000	250	2,500	Do.	5	6		
	d ...	Do.	250	1,200	250	1,700	Do.	5	6		Rs. 200 pearls, Rs. 1,000 diamonds.
21	*a* ...	Head Ornaments	100	1,800	100	2,000	Rām Nāth	5	4	Late Mahārāja of Jeypore	
	b ...	Do.	200	1,200	200	1,600	Rām Singh	5	6	Late Mahārāja of Jodhpore	
	c ...	Do.	400	4,200	400	5,000	Do.	5	6	Late Mahārāja of Jeypore	Rs. 2,500 diamonds, Rs. 1,700 pearls.
	d ...	Do.	300	4,500	200	5,000	Do.	5	6	Do. do.	Rs. 2,500 diamonds, Rs. 2,000 pearls.
	e ...	Do.	250	3,500	250	4,000	Do.	5	6	General Brooke	Rs. 2,500, Rs. 1,000 pearls.
	f ...							5	4		
	g ...							5	4		
	k ...	Brooches and Pendants. Each.	100	800	100	1,000		5	4		
	l ...							5	4		
	m ...							5	4		
	n ...							5	4		
	h ...	Small Pendant, *Dūg dāgi*	30	200	70	300		5	2		
22	*a-b* ...	Ear-rings. Per pair				5,000			½		Pearls.
	c-d ...	Do. do.				2,000			½		Pearls.
	e	Ornament for back of hand	500	1,500	200	2,200		5	2		Set with diamonds.
	f	Ear-ring				2,000		5	1½		
	g and *k*	Pendants for a Necklace	100	800	100	1,000		5	2		
	h and *l*	Do. do.	100	800	100	1,000		5	2		
23	*a*	Head Ornament	100	4,000	100	4,200		5	2	Thakur of Pokaran	Pearls and crystals.
	b	Do.	500	1,000	500	2,000	Rām Singh	5	12		
	c	Fly-whisk Handle.	500	4,000	500	5,000	Gopāl Singh	5	6	Mahārāja of Jodhpore	Rs. 1,500 diamonds, Rs. 2,500 pearls.
	d	Do.	500	2,000	500	3,000	Rām Singh	5	12		
24	*a*	Anklet	500	2,000	500	3,000		5	12	Mahārāja of Jeypore	Set with diamonds.
	b	Bracelet	100		50	150		5	6	Common patterns	
	c	Do.	200		50	250		5	2	Do. do.	
	d	Do.	100		50	150		5	2	Do. do.	
25	*a*	Epaulet				2,000	Rām Singh	2	2	Late Mahārāja of Jeypore	
	b	Do.				3,000	Hira Singh	6	4	Thākur of Digi	
26	*a-b-f* ..	Bracelets									
	c	Ear-ring	20	400	50	470		5	4		Rs. 100 diamonds, Rs. 300 pearls.
	d	Do.	10	1,165	25	1,200		3	1		Rs. 165 diamonds, Rs. 1,000 pearls.
	e	Do.	25	11,000	25	11,050		2	½		Rs. 1,000 diamonds. Rs. 10,000 pearls.

10A

PLATE 1. Group of Jeypore Enamellers at work.

PLATE 2. 1 to 20.—A series of designs for the Backs of Daggers, or Hunting Knives.

1 2 3 4



5 6 7 8

9

PLATE 9. 1 to 8.—Designs for Bracelets. 1 to 4 are parts of 5 to 8. 9.—The end of an Elephant Goad or *Ankus*. The Female Figure issues from the mouth of a Dragon (*Azhdar*).

63875

PLATE 4. *a*.—Top Mount of Sword Scabbard. *b*, *c*.—Bottom Mount of Sword Scabbard (both sides).
d.—Bottom Mount of Dagger Sheath.

PLATE 5. *a*.—Sword Handle. Enamel on Gold set with Diamonds. *b, c*.—Central and Point Mounts of Sword Scabbard

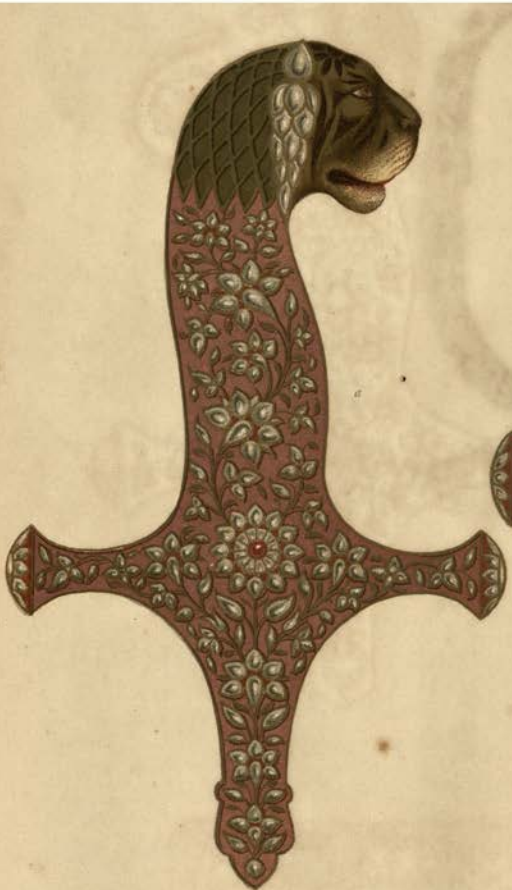


PLATE 6. *a.*—Tiger Headed Sword Handle. *b.*—Hakim Shahi Sword Hilt.

PLATE 7 *a*— Sword Hilt. *b*, *c*.—Side Pieces of *a*. *d*.—Sword Hilt with Hand Guard. *e*.— Piece of *d*.

PLATE 8. *a.*—Cup. *b.*—Spoon. *c.*—Saucer for *a*.

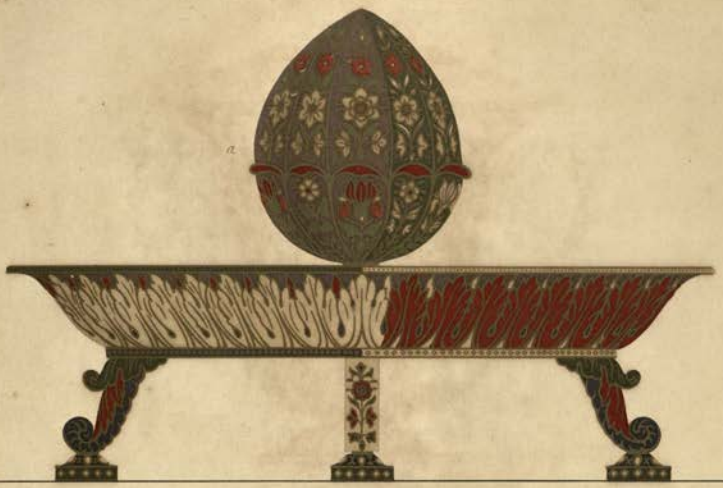


PLATE 9. *a*.—'Atrdān, or Perfume Stand. *b*.—Salver.

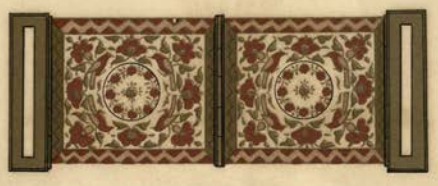
a

b

PLATE 10. *a.*—Vase with Four Medallions *(Chaughara-phul dan)*. *b.*—Bowl.

a

b



c

PLATE 11. *a.*—Vase *(Chaughara dân)*. *b.*—Sword Case *(Partala)*. *c.*—Bowl

PLATE 12. *a*.—Neck Ornament *(Arya)*, Marwar pattern, worn by Hindus. *b*.—Top of a Box.

PLATE 13. *a.*—Boss of Shield. *b.*—Necklace, with Octagonal *(Ath-pahlū)* Pendants. *c.*—Necklace, with Pendants. *d.*—Necklace and Pendants.

PLATE 19 *a.*—Ear-ring *(Kān)* *b.*—Necklace. *c.*—Necklace.

PLATE 16. *a*.— Necklace (*Kantha*). *b*.—Forehead Ornament.

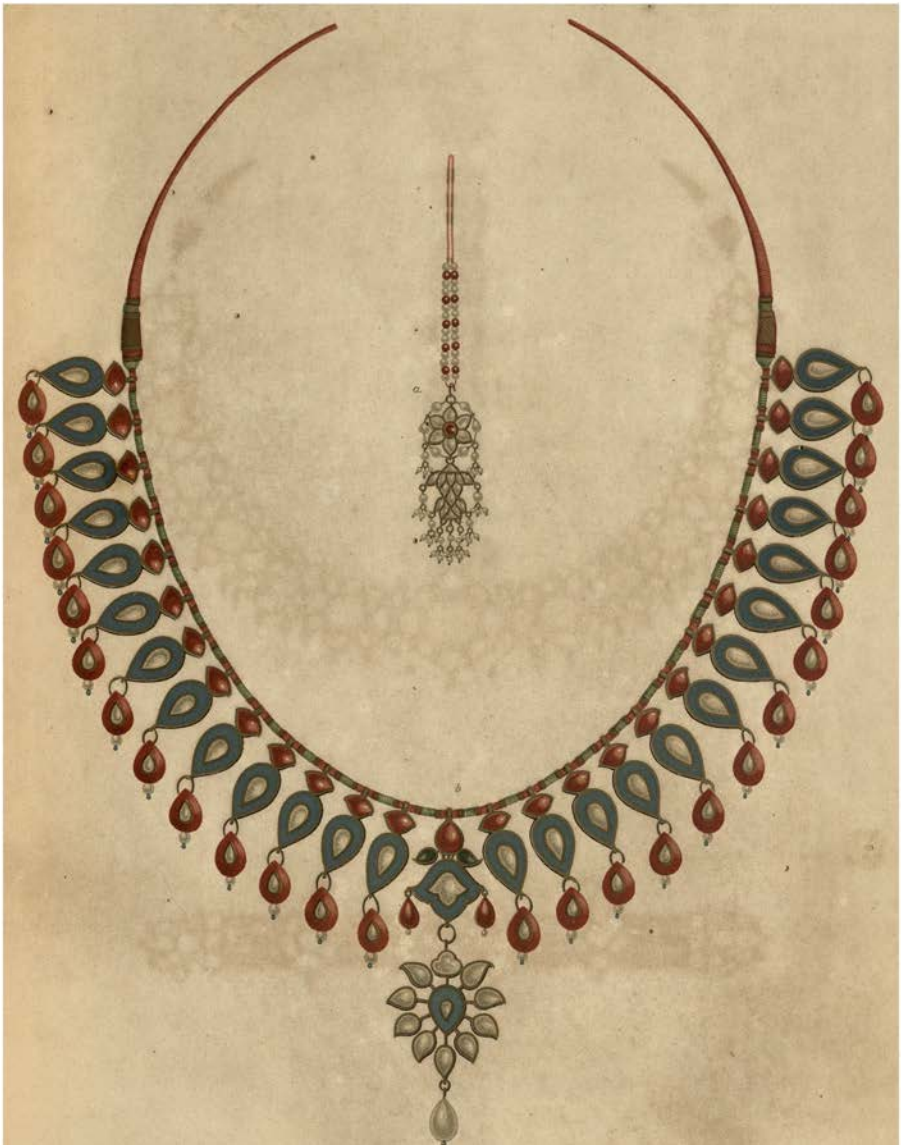


PLATE 17. *a*.—Ear-ring (*Machhi Jali*); Fish pattern. *b*.—Necklace (*Champa-Kali*)

PLATE 18. *b*.—Necklace (*Hár*). *a, c, d, e, f, g, h*.—Ear-rings (*Pipal pati*).

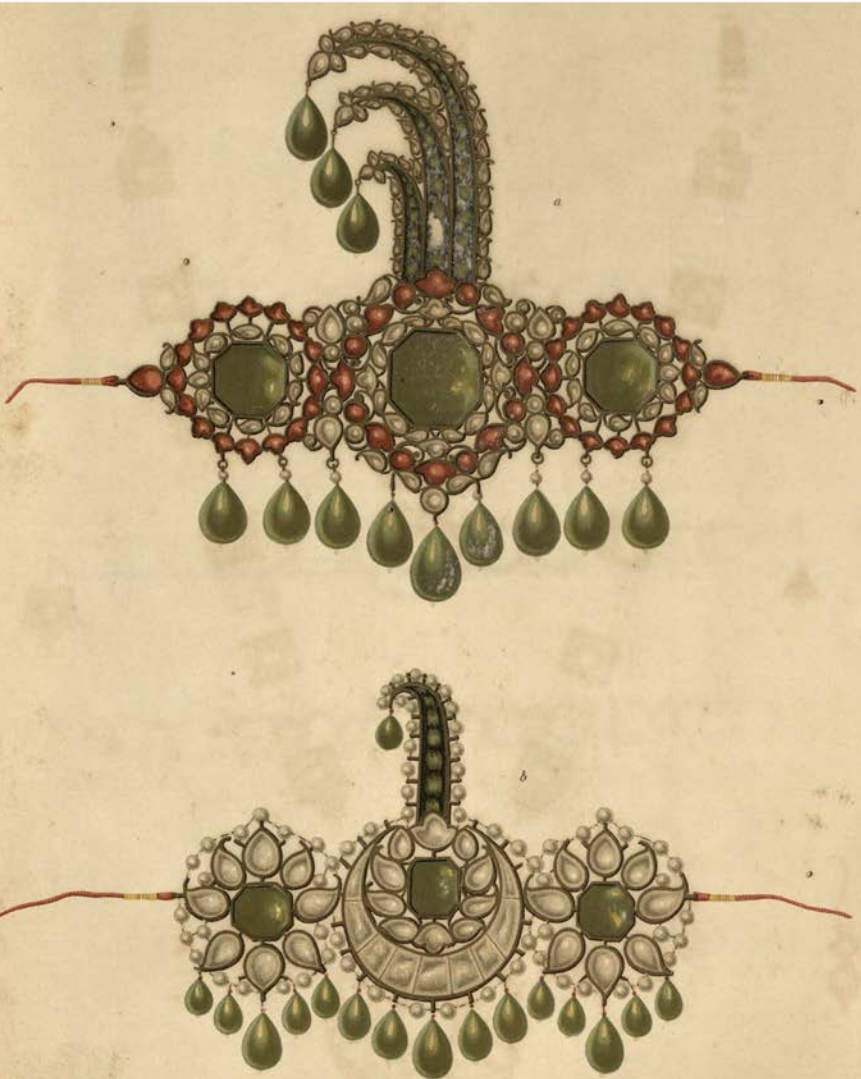


PLATE 19. *a* and *b*.—Forehead Ornaments (*Sarpech*).

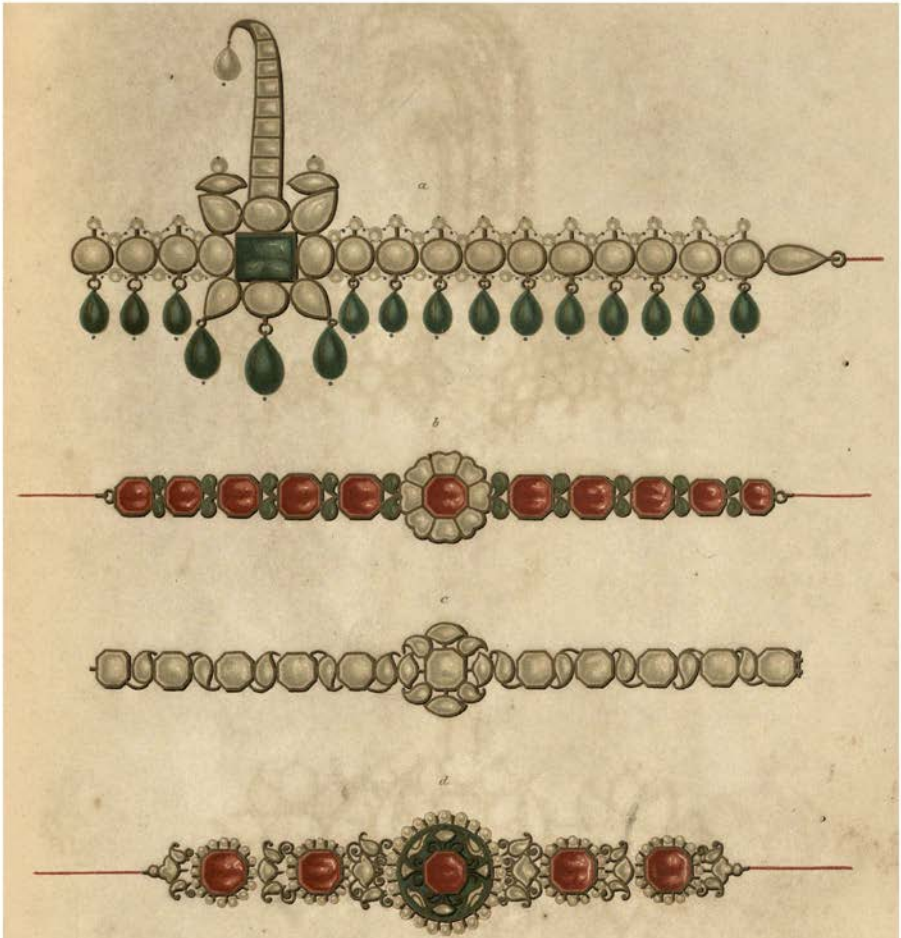


PLATE 20. *a*.—Forehead Ornament (*Sarpech*), with Plume. *b*.—Bracelet (*Panchi*). *c*.—Bracelet (*Panchi*).
d.—Bracelet (*Panchi*).

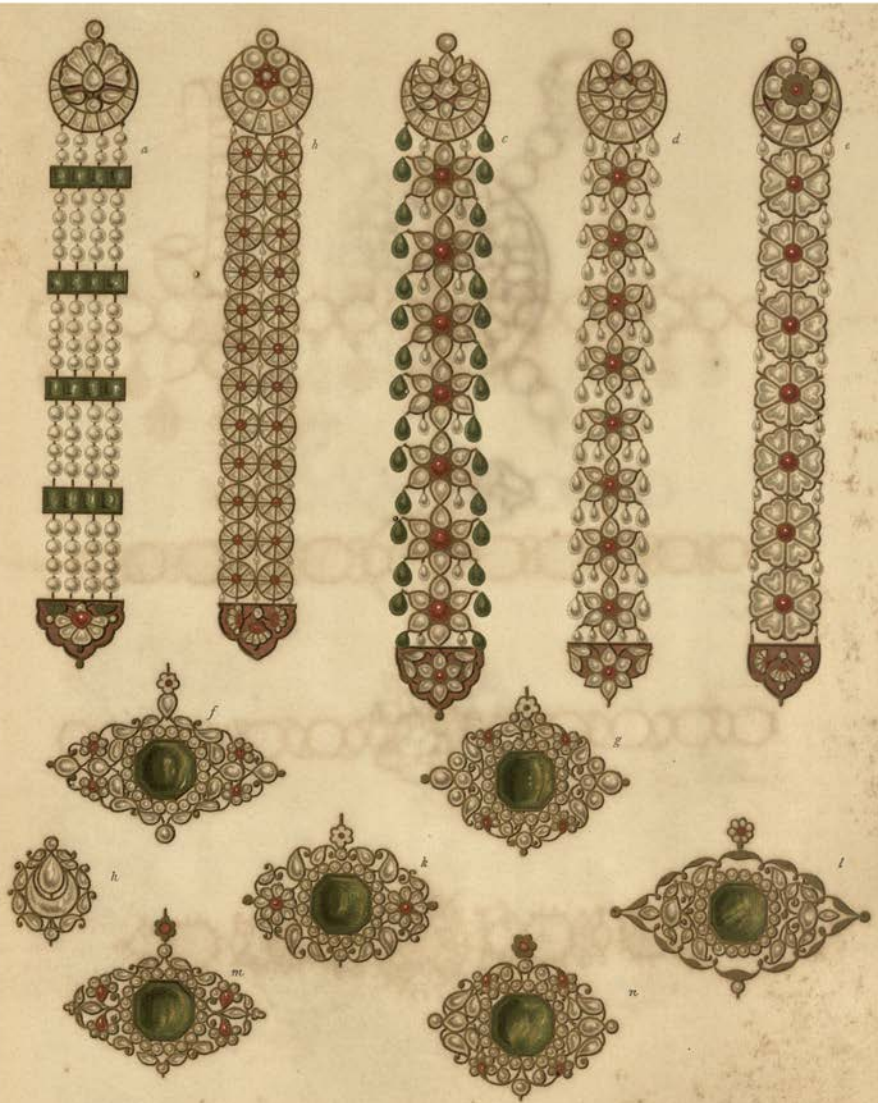


PLATE 21. *a* to *e*.—Ornaments worn on the side of the Head (*Jhālā*). *f* to *n*.—Brooches or Pendants.

PLATE 22. *a*, *b*.—Ear-rings (*Gimda*). *c*, *d*.—Ear-rings (*Karanphul*). *e*.—Hand Ornament (*Hāth-phūl*).
f.—Pendant (*Bala*). *g*, *h*, *k* and *l*—(*Niyām*.) Parts of a Necklace worn by Men.

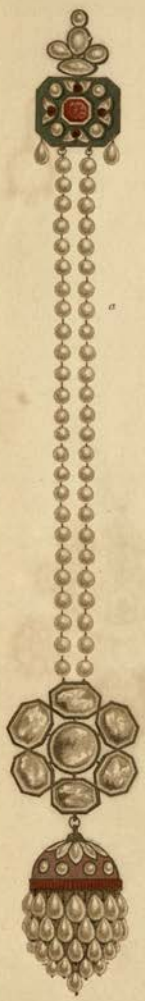


PLATE 23. *a.*—*Jhālā*, worn over side of Head. *b.*—*Jhālā*, worn over side of Head. *c.*—Fly Whisk Handle or *Chāmara Ki-dandi*. *d.*—Fly Whisk Handle, *Chamar* or *Chāmara*.

PLATE 24. *a.*—Elephant Headed Bracelet. *b.*—Dragon Headed Bracelet. *c.*—Elephant Headed Bracelet.
d.—Snake Pattern Bracelet.

PLATE 25. Epaulets.

PLATE 26. *a, b, f.*—Bracelets. *c.*—Ear-ring. *d.*—Ear-ring. *e.*—Ear-ring.

PLATE II. Enamel Worker's Implements. *a.*—Poker. *b.*—Tongs. *c.*—Forceps. *d.*—Scissors. *e.*—Pestle and Mortar. *f.*—Blowpipe.

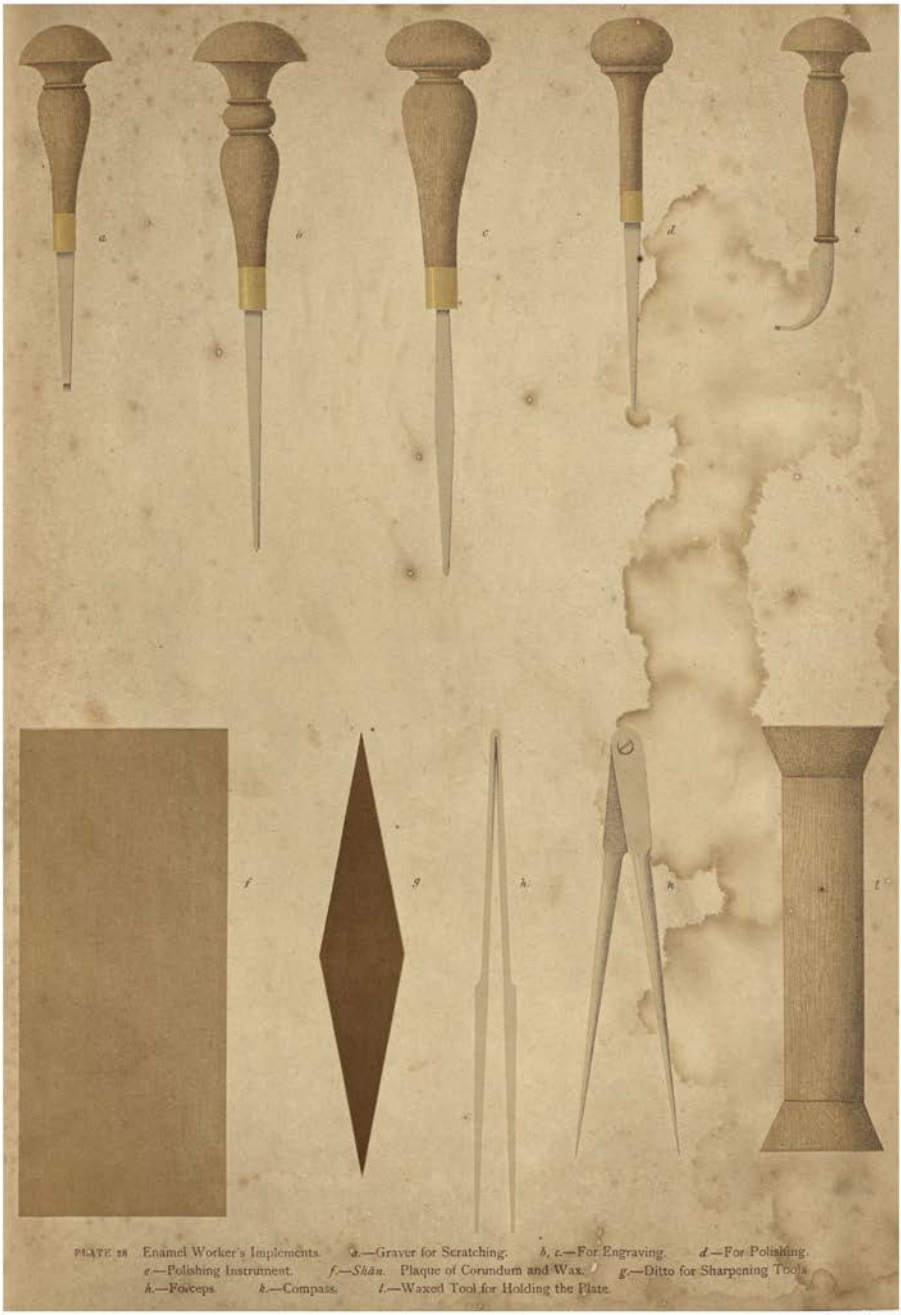


PLATE 28 Enamel Worker's Implements. *a.*—Graver for Scratching. *b, c.*—For Engraving. *d.*—For Polishing. *e.*—Polishing Instrument. *f.*—*Shān.* Plaque of Corundum and Wax. *g.*—Ditto for Sharpening Tools *h.*—Forceps. *k.*—Compass. *l.*—Waxed Tool for Holding the Plate.

00063875

Digitized with financial assistance from
Observer Research Foundation
on 17 May, 2019